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EXAMINER
JOO, JOSHUA

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _31 August 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-14 and 32-44_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-14 and 32-44_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

1.   Claims 1-14, 32-44 are presented for examination.

2.   Claims 1-14, 32-44 are rejected.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-14, 32-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's Admitted Prior Art (AAPA), Specification, Pages #1-9 and in view of Narisi et al,

#6,233,619 (Narisi hereinafter).

5.   As per claim 1, AAPA teaches of:

        a)   a data communication interface driver configured to communicatively link with a

data communication interface of the host device via the point-to-point data communication link

(Page 1, lines 8-10; Page 7, lines 13-15. Remote NDIS miniport driver communicates with

remotely connected device. Computing devices can be communicatively linked with a point-to-

point communication connection.).

6.   AAPA does not teach of:

        a virtual driver component configured to communicate with the data communication

interface device and the client device; and

a virtual network configured to communicatively link the data communication interface

driver with the virtual driver component.

7.   Narisi teaches an invention for a transport layer interface for high-speed communication

between two computer systems where a virtual LAN miniport driver is used to provide

communications between two servers. Narisi also teaches that a virtual LAN driver appears as

a "Virtual Lan" to provide a link between NDIS interface and the server (Fig 8; Col 16, lines 29-

36; 43-60).

8.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of AAPA and Narisi because the teachings of Narisi to use a

virtual LAN miniport driver to communicate with the two servers would improve the invention of

AAPA by providing a high speed communication interface, and the use of a virtual LAN allows

for the two devices to use their native mechanism to communicate with each other.

9.   As per claim 32, AAPA teaches of:

        a)   providing a network communication component designed for data communication

over a distributed network (Page 6, lines 6-8. Computing device has a distributed network data

communication components.).

        b)   providing a connection interface to couple the network communication

component with a host computing device (Page 6, lines 16-21; Page 7, lines 13-15. Remote

NDIS miniport driver communicates with remotely connected device through a bus/network

microport.).

10.   AAPA does not teach of:

providing a virtual network to communicatively link the network communication

component and a virtual driver component of a client computer device.

11.   Narisi teaches an invention for a transport layer interface for high-speed communication

between two computer systems where a virtual LAN miniport driver is used to provide

communications between two servers. Narisi also teaches that a virtual LAN driver appears as

a "Virtual Lan" to provide a link between NDIS interface and the server (Fig 8; Col 16, lines 29-

36; 43-60).

12.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of AAPA and Narisi because the teachings of Narisi to use a

virtual LAN miniport driver to communicate with the two servers would improve the invention of

AAPA by providing a high speed communication interface, and the use of a virtual LAN allows

for the two devices to use their native mechanism to communicate with each other.

13.   As per claims 2, 33, and 34, AAPA teaches a data communication system, wherein the

data communication interface driver is a Remote Network Driver Interface Specification (NDIS)

driver and the data communication interface is a Remote NDIS component configured to

communicate with the Remote NDIS driver via the point-to-point data communication link (Page

1, lines 8-10; Page 7, lines 12-15; Page 8, lines 1-2. The data communication interface driver is

a Remote NDIS miniport driver, which communicates with the Remote NDIS driver of the

remote device via a USB connection. Computing devices can be communicatively linked with a

point-to-point communication connection. (It is inherent that the remote device's data

communication interface is a Remote NDIS component because it is able to communicate NDIS messages with the Remote NDIS driver miniport driver.).

14.   As per claims 3 and 35, AAPA teaches a data communication system as recited in claim 1, wherein the data communication interface driver is a Remote Network Driver Interface Specification (NDIS) driver and the data communication interface is a Remote (NDIS) component configured to communicate Remote NDIS messages with the Remote NDIS driver via the point-to-point communication link (Page 1, lines 8-10; Page 7, lines 12-15; Page 8, lines 1-2. The data communication interface driver is a Remote NDIS miniport driver, which communicates Remote NDIS messages with the Remote NDIS driver of the remote device via a USB connection. Computing devices can be communicatively linked with a point-to-point communication connection (It is inherent that the remote device's data communication interface is a Remote NDIS component because it is able to communicate NDIS messages with the Remote NDIS driver miniport driver.).

15.   As per claims 4 and 42, AAPA does not teach of a data communication system, wherein the virtual network is a local area network.

16.   Narisi teaches an invention for a virtual transport layer interface, where the virtual network is a LAN (Col 16, lines 29-36).

17.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Narisi. The teachings of Narisi's of a to use a virtual LAN improves AAPA by allowing for two devices to use their native mechanism to communicate with each other.

18.   As per claim 5, AAPA teaches of a data communication interface driver that is a Remote Network Driver Interface Specification driver (Page 7, lines 12-15).

19.   AAPA does not teach of a Remote Network Driver Interface Specification (NDIS) driver configured to communicate with the virtual driver component via the virtual network.

20.   Narisi teaches an invention where the data communication interface driver is a NDIS driver that communicates with a virtual driver in a virtual LAN to communicate between two servers (Col 16, lines 29-44).

21.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Narisi. The teachings of Narisi of a NDIS driver that communicates with a virtual driver in a virtual LAN improve AAPA by providing a high speed communications interface. As taught by Narisi, the virtual LAN also allows for two devices to use their native mechanism to communicate with each other.

22.   As per claim 6, AAPA teaches a data communication system, wherein the data communication interface is a Remote Network Driver Interface Specification (NDIS) driver configured to communicate Remote NDIS messages (Page 7, lines 12-15).

23.   AAPA does not teach that the Remote Network Driver Interface Specification (NDIS) driver communicates with the virtual driver component via the virtual network.

24.   Narisi teaches an invention where the data communication interface driver is a NDIS driver that communicates with a virtual driver in a virtual LAN in order to communicate between the two servers (Col 16, lines 29-44).

25.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of AAPA and Narisi. The teachings of Narisi of a NDIS driver

that communicates with a virtual driver in a virtual LAN improve AAPA by providing a high speed

communications interface. As taught by Narisi, the virtual LAN also allows for two devices to

use their native mechanism to communicate with each other.

26.   As per claims 7 and 43, AAPA teaches a data communication system, wherein the data

communication interface driver is a Remote Network Driver Interface Specification (NDIS) driver

and the data communication interface is a Remote NDIS component configured to communicate

with the Remote NDIS driver via the point-to-point data communication link. (Page 1, lines 8-10;

Page 7, lines 12-15; Page 8, lines 1-2. The data communication interface driver is a Remote

NDIS miniport driver, which communicates with the Remote NDIS driver of the remote device

via a USB connection. Computing devices can be communicatively linked with a point-to-point

communication connection (It is inherent that the remote device's data communication interface

is a Remote NDIS component because it is able to communicate NDIS messages with the

Remote NDIS driver miniport driver.).

27.   AAPA does not teach that the Remote NDIS driver is configured to communicate with

the virtual driver component via the virtual network.

28.   Narisi teaches an invention where the data communication interface driver is a NDIS

driver that communicates with a virtual driver in a virtual LAN in order to communicate between

the two servers (Col 16, lines 29-44).

29.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of AAPA and Narisi. The teachings of Narisi of a NDIS driver   ·

that communicates with a virtual driver in a virtual LAN improve AAPA by providing a high speed

communications interface. As taught by Narisi, the virtual LAN also allows for two devices to

use their native mechanism to communicate with each other.

30.   As per claims 8 and 44, AAPA teaches a data communication system, wherein the data

communication interface driver is a Remote Network Driver Interface Specification (NDIS) driver

and the data communication interface is a Remote NDIS component configured to communicate

Remote NDIS messages with the Remote NDIS driver via the point-to-point data communication

link (Page 1, lines 8-10; Page 7, lines 12-15; Page 8, lines 1-2. The data communication

interface driver is a Remote NDIS miniport driver, which communicates Remote NDIS

messages with the Remote NDIS driver of the remote device via a USB connection. Computing

devices can be communicatively linked with a point-to-point communication connection (It is

inherent that the remote device's data communication interface is a Remote NDIS component

because it is able to communicate NDIS messages with the Remote NDIS driver miniport

driver.).

31.   AAPA does not teach that the Remote NDIS driver is configured to communicate with a

virtual driver component via the virtual network.

32.   Narisi teaches an invention where the data communication interface driver is a NDIS

driver that communicates with a virtual driver in a virtual LAN in order to communicate between

the two servers (Col 16, lines 29-44).

33.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of AAPA and Narisi. The teachings of Narisi of a NDIS driver

that communicates with a virtual driver in a virtual LAN improve AAPA by providing a high speed

communications interface. As taught by Narisi, the virtual LAN also allows for two devices to

use their native mechanism to communicate with each other.

34.   As per claims 9 and 36, AAPA teaches a data communication system, further comprising

a connection interface configured to couple the point-to-point data communication link with the

client device (Page 1, lines 8-10; Page 7, lines 15-19. Devices can be linked with a point-to-

point communication connection. Remote NDIS miniport driver communicates with a microport

driver layer where the microport driver can include a USB bus microport, a 1394 bus microport,

and a Bluetooth microport.).

35.   As per claims 10 and 37, AAPA teaches a data communication system, further

comprising a Universal Serial Bus data communication interface configured to couple the point-

to-point data communication link with the client device (Page 7, lines 15-19. Remote NDIS

miniport driver communicates with a microport driver layer, which can include a USB bus

microport.).

36.   As per claims 11 and 38, AAPA teaches a data communication system, further

comprising a 1394 bus data communication interface configured to couple the point-to-point

data communication link with the client device (Page 7, lines 15-19. Remote NDIS miniport

driver communicates with a microport driver layer, which can include a 1394 bus microport.).

37.   As per claims 12 and 39, AAPA teaches a data communication system, further

comprising a wireless data communication interface configured to couple the point-to-point data

communication link with the client device (Page 7, lines 15-19. Remote NDIS miniport driver

communicates with a microport driver layer, which can include a Bluetooth microport.).

38.   As per claims 13 and 40, AAPA teaches a data communication system, further

comprising a Bluetooth data communication interface configured to couple the point-to-point

data communication link with the client device (Page 7, lines 15-19. Remote NDIS miniport

driver communicates with a microport driver layer, which can include a Bluetooth microport.).

39.   As per claims 14 and 41, AAPA teaches a data communication system comprising a

data communication interface that can be a USB bus microport, 1394 bus microport, 1394 bus

microport, or any other similar communication protocol microport (Page 7, lines 15-19).

40.   AAPA does not specifically teach a data communication system, further comprising an

infrared data communication interface configured to couple the point-to-point data

communication link with the client device.

41.   It would have been obvious to one of ordinary skill in the art at the time the invention was

made to use an infrared data communication interface because it would improve the capability

of the computing device by allowing wireless communication to remote devices such as laptops,

notebooks, and printers.

Conclusion

41.   A shortened statutory period for reply to this Office action is set to expire THREE

MONTHS from the mailing date of this action.

42.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Joshua Joo whose telephone number is 571 272-3966 and fax number is

571 273-3966. The examiner can normally be reached on Monday to Thursday 8 to 5:30.

43.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A Follansbee can be reached on 571 272-3964.

44.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 11, 2005
JJ

JOHN FOLLANSBEE
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